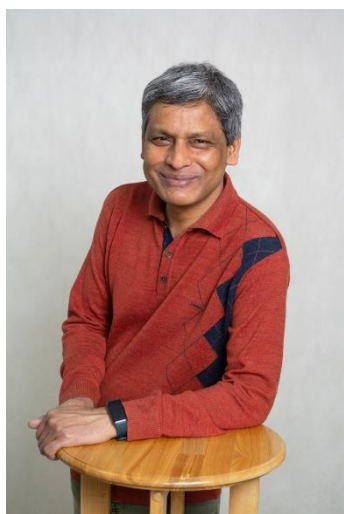



PERSONAL INFORMATION **Bijan Saha, D.Sc.**


 Leading research fellow
 Laboratory of Information Technologies
 Joint Institute for Nuclear Research, Dubna, Russia
 Professor
 Institute of Physical Research and Technologies
 Russian Peoples' Friendship University (RUDN
 University), Moscow, Russia

 +7 4962163959  +7 9629095155

 bijan@jinr.ru

 <http://spinor.bijansaha.ru>

 Skype [bijan64](#)

Sex M
 Date of birth 02/01/1964
 Nationality Russian

 WORK
EXPERIENCE

Leading

- Replace with dates (from - to)
- Leading Research Fellow – 12.2010 – Current
 (LIT, JINR, Dubna, <http://www.jinr.ru>)
 - Professor – 01.09.2025 – Current
 (Institute of Physical Research and Technologies, Faculty of Science, Russian People's Friendship University, Moscow, Russia, <http://www.rudn.ru>)
 - Associate Professor – 01.2018 – 31.08.2025
 (Institute of Physical Research and Technologies, Faculty of Science, Russian People's Friendship University, Moscow, Russia, <http://www.rudn.ru>)
 - Senior Research Fellow - 10.2001 – 12.2010
 (LIT, JINR, <http://www.jinr.ru>)
 - Stipendent – 10.1999 – 10.2001
 (LIT, JINR, <http://www.jinr.ru>)
 - Stipend – 05.1994 – 10.1999
 (BLTP, JINR, <http://www.jinr.ru>)
 - Associate Professor – 2001 – 2002 (Department of Experimental Physics, Russian Peoples' Friendship University, Moscow, Russia <http://www.rudn.ru>)
 - Associate Professor – 2007 (Department of Higher and Applied Mathematics, University of Dubna, Dubna, <http://uni-dubna.ru>)
- The main activities were related to study the problem of modern cosmology with spinor field. Beside this I have also worked in the field of electrodynamics, general relativity and symmetry in physics. **I'm in the List of 2% World Ranking Scientist from 2020 onward**

EDUCATION
AND
TRAINING

Replace with dates (from - to) M.Sc. in Theoretical Physics (Russian Peoples' Friendship University, Moscow, Russia, 1984 – 1989, <http://www.rudn.ru>) Replace with EQF (or other) level if relevant

Ph.D. in Theoretical Physics Physics (Russian Peoples' Friendship University, Moscow, Russia, 1991 – 1993, <http://www.rudn.ru>)
„Multidimensional solitons in nonlinear models with gravitation”

D.Sc. in Theoretical Physics (2010)
„Spinor fields in anisotropic cosmology”

Field of Interests:

Soliton modles of Atom, Electrodynamics with toroid moments, Solitons in General Relativity, Symmetries in Physics, Anisotropic Cosmological Modles with Spinor Field, Dark Energy

PERSONAL
SKILLS

Mother tongue(s) Bengali

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
Replace with language	English and Russian	English and Russian	English and Russian	English and Russian	English and Russian
Replace with language	Enter level	Enter level	Enter level	Enter level	Enter level

EF Set English Certificate, level C2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
[Common European Framework of Reference for Languages](#)

ommunication skills

Have a quite good communicational skill. Worked in different positions in many social organizations. Photography is my hobby (<http://bijansaha.ru>). Organized more than 10 personal photo exhibitions. Regularly take part in many cultural functions and Photo exhibitions in Dubna and Moscow. Write regularly on different issues in Bangladeshi and Indian e-journals (<http://blogger.com/profile/13796885981186443293>)

Organisational / managerial skills

- Participated in different capacities to solve many problems of Bangladeshis living in Moscow. Participated in different meetings with Bangladesh Embassy.

Job-related skill

- Good knowledge in Windows, Latex, Maple, Photoshop and many others related to my job.

Digital competence

SELF-ASSESSMENT

Information processing	Communication	Content creation	Safety	Problem solving
Enter level	B1	B1	A1	B1

Levels: Basic user - Independent user - Proficient user
[Digital competences - Self-assessment grid](#)

Replace with name of ICT-certificate(s)

Replace with your other computer skills. Specify in what context they were acquired.
Example:

- good command of office suite (word processor, spread sheet, presentation software)
- good command of photo editing software gained as an amateur photographer

- Other skills
- Photography (have more than 10 personal Photo exhibitions), Writings (Essay, stories, popular books on cosmology in Bengali, English, Russian)

ADDITIONAL INFORMATION

Ids in other cites

Scopus Author ID: 7202946069

Web of Science ResearcherID: E-6604-2018

Google Scholar ID: BU1tahAAAAAJ

Orcid ID: 0000-0003-2812-8930

SPIN Code: 9803-5325

AD Scientific Index ID: 1083949

<https://scholar.google.com/citations?hl=en&user=BU1tahAAAAAJ>

https://www.researchgate.net/profile/Bijan_Saha3

<https://jinr.academia.edu/BijanSaha>

<https://publons.com/researcher/1588547/bijan-saha/>

<https://www.mendeley.com/profiles/bijan-saha2/>

<https://orcid.org/0000-0003-2812-8930>

<https://adscientificindex.com/scientist/bijan-saha-/1083949>

[Top SCINET - Top 2% Scientists](#)

Projects	Director, Joint Romania-Dubna project from 2009 - 2018
Conferences	Took part in more than 50 Russian and International Conferences
Seminars	Gave talks in large number of seminars in Russia, Romania, Bangladesh, India
Memberships	Was a Member of American Mathematical Society
Citations	More than 2503 citations (https://www.researchgate.net)
Index Hirsch	25(Scopus) , 25 (Web of Science), 27 (researchgate)
Presentations	Gave invited talk in many Institutes in Russia, Bangladesh, India, UAE Some titles are

Spinor field in Bianchi type-I space-time with Lyra's geometry RUDN University (2025)

Spinor field in cosmology with Lyra's geometry. Kazan(2024)

Interacting spinor and electromagnetic fields in Bianchi-I space-time. RUDN University (2024)

Interacting spinor and electromagnetic fields in cosmology. Kazan 2023

Maxwell-Dirac system in cosmology. Bauman University, Moscow (2023)

Influence of spinor field on space-time geometry
Peoples` Friendship University, Moscow, Russia (2016).

$f(R,T)$ theory of gravity: Some remarks
Peoples` Friendship University, Moscow, Russia " (2016).

Role of spinor field in the evolution of the Universe
New York University, Abu Dhabi, UAE, (2015).

Dark Energy: A New Chapter of Modern Cosmology
New York University, Abu Dhabi, UAE, (2015).

Spinor field and anisotropic cosmological models
Indian Statistical Institute, Kolkata, India, (2014).

Spinor field in cosmology and problem of initial singularity, isotropization and late-time acceleration
Science College, Calcutta University, Kolkata, India, (2014).

Spinor description of material fields and its role in Cosmology
Tata Institute of Fundamental Research, Mumbai, India, (2014).

Spinor field in cosmology: Problems and Possibilities
Institute of Physics, Bhubaneswar, India, (2014).

Cosmology with Spinor field: Advantages and Disadvantages
Harish-Chandra Research Institute, Allahabad, India, (2014).

Modern Cosmology: History of Cosmological Constant
Atomic Energy Commission, Savar, Bangladesh, (2014).

Spinor description of Dark Energy
Indian Association for Cultivation of Science, Kolkata, India, (2014).

Nonlinear spinor field in anisotropic cosmology: A fresh look
Center for Theoretical Physics, Jamia Millia Islamia,
New Delhi, India, (2014).

Spinor field in Cosmology and the problem of isotropization
Institute of mathematical Sciences, Chennai, India, (2014).

Publications

More than 200 publications with more than 125 in Peer Review Journals. Full list of publications can be found in http://spinor.bijansaha.ru/pinfo/pub_list.pdf Some of the most cited and recent publications are

Bijan Saha:

Spinor field in Bianchi type-I Universe: regular solutions,

Physical Review D **64**, 123501 (2001)

DOI:10.1103/PhysRevD.64.123501

Bijan Saha and Todor Boyadjiev:

Bianchi type-I cosmology with scalar and spinorfields,

Physical Review D **69**,124010(2004)

DOI: 10.1103/PhysRevD.69.124010

Bijan Saha:

Anisotropic cosmological models with a perfect fluid and a Λ term

Astrophysics and space science **302**,83 - 91 (2006)

DOI:10.1007/s10509-005-9008-5

Anirudh Pradhan, H. Amirhashchi, and BijanSaha:

Bianchi type-I anisotropic dark energy model with constant deceleration parameter

International Journal of Theoretical Physics **50**, 2923 - 2938 (2011)

DOI: 10.1007/s10773-011-0793-z

Bijan Saha:

Nonlinear spinor field in Bianchi type-I cosmology:inflation, isotropization, and late time acceleration

Physical Review D **74**,124030 (2006)

DOI:10.1103/PhysRevD.74.124030

Bijan Saha:

Bianchi type Universe with viscous fluid

Modern Physics Letters A **20** (28), 2127 - 2143 (2005)

DOI:10.1142/S021773230501830X

Bijan Saha:

Anisotropic cosmological models with perfect fluid and dark energy

Chinese Journal of Physics **43** (6),1035-1043(2005)

BijanSaha, H. Amirhashchi, and Anirudh Pradhan:

Two-Fluid Scenario for Dark Energy Models in an FRW Universe-Revisited

Astrophysics and Space Science **342**, 257 – 267(2012)

DOI:10.1007/s10509-012-1155-x

Saha B. and Shikin, G.N.:

Interacting Spinor and Scalar Fields in Bianchi Type I Universe Filled with Perfect Fluid: Exact Self-consistent Solutions

General Relativity and Gravitation **29** (9),1099-1112 (1997)

DOI:10.1023/A%3A1018887024268

Bijan Saha:

Nonlinear Spinor Field in cosmology

Physical Review D **69**, 124006 (2004)

DOI: [10.1103/PhysRevD.69.124006](https://doi.org/10.1103/PhysRevD.69.124006)

H. Amirhashchi, Anirudh Pradhan, and Bijan Saha:

Variable equation of state for Bianchi type-VI₀ dark energy models

Astrophysics and Space Science **333**, 295 – 303 (2011)

DOI: [10.1007/s10509-010-0577-6](https://doi.org/10.1007/s10509-010-0577-6)

Anil Kumar Yadav and Bijan Saha:

LRS Bianchi-I Anisotropic Cosmological Model with Dominance of Dark Energy

Astrophysics and Space Science **337**, 759 – 765 (2012)

DOI: [10.1007/s10509-011-0861-0](https://doi.org/10.1007/s10509-011-0861-0)

Bijan Saha and V. Rikhvitsky:

Bianchi type I universe with viscous fluid and a Lambda term: A qualitative analysis

Physica D **219**, 168-176 (2006)

DOI: [10.1016/j.physd.2006.06.003](https://doi.org/10.1016/j.physd.2006.06.003)

Saha B. and Shikin, G.N.:

Nonlinear Spinor Field in Bianchi type-I Universe filled with Perfect Fluid: Exact Self-consistent Solutions

Journal of Mathematical Physics **38** (10), 5305 - 5318 (1997)

DOI: [10.1063/1.531944](https://doi.org/10.1063/1.531944)

Dubovik, V.M., Martsenyuk, M.A. and Bijan Saha:

Material Equations of Electrodynamics with Toroidal Polarizations

Physical Review E **61**(6), 7087 - 7097 (2000)

DOI: [10.1103/PhysRevE.61.7087](https://doi.org/10.1103/PhysRevE.61.7087)

Mahendra Goray, B. Saha:

Observational Constraints on a Spinor Field Generalized Chaplygin Gas Model in a Spherically Symmetric FLRW Spacetime

European Physical Journal C **85**, 1146 (2025)

DOI: [10.1140/epjc/s10052-025-14895-3](https://doi.org/10.1140/epjc/s10052-025-14895-3)

Bijan Saha:

Spinor field in Bianchi type-I cosmology with Lyra's geometry

Journal of Mathematical Physics **66** (10) , 102501 (2025)

DOI: [10.1063/5.0270836](https://doi.org/10.1063/5.0270836)

66}(10), 102501 (2025)

Bijan Saha:

Spinor field in FLRW cosmology: spherically symmetric case

Journal of Experimental and Theoretical Physics **167**(1), 49 - 58 (2025)

DOI: [10.31857/S0044451025010043](https://doi.org/10.31857/S0044451025010043)

Bijan Saha:

Maxwell-Dirac system in cosmology

International Journal of Modern Physics A **39**(29), 2450117 (2024)

DOI: [10.1142/S0217751X24501173](https://doi.org/10.1142/S0217751X24501173)

Bijan Saha:

Spinor field in FLRW cosmology

Universe **9**(5), 243 (2023)

[DOI:10.3390/universe9050243](https://doi.org/10.3390/universe9050243)

Bijan Saha:
Time dependent Spinor field in a static cylindrically symmetric space-time
The European Physical Journal Plus **137**, 1063 (2022)
[DOI: 10.1140/epjp/s13360-022-03275-5](https://doi.org/10.1140/epjp/s13360-022-03275-5)

Bijan Saha:
Spinors in cylindrically symmetric space-time
Universe **6**, 152 (2020)
[DOI:10.3390/universe6090152](https://doi.org/10.3390/universe6090152)

Bijan Saha:
Non-minimally coupled nonlinear spinor field in FRW cosmology
Astrophysics and Space Science **365**, 68 (2020)
[DOI: 10.1007/s10509-020-03780-y](https://doi.org/10.1007/s10509-020-03780-y)

Bijan Saha:
Interacting self-consistent system of spinor and gravitational fields
International Journal of Modern Physics A **35**, 2040047 (2020)
[DOI:10.1142/S0217751X20400473](https://doi.org/10.1142/S0217751X20400473)

K.A. Bronnikov, Yu.P. Rybakov, and Bijan Saha:
Spinor fields in spherical symmetry. Einstein-Dirac and other space-times
The European Physical Journal Plus **135**, 124 (2020)
[DOI: 10.1140/epjp/s13360-020-00150-z](https://doi.org/10.1140/epjp/s13360-020-00150-z)

Bijan Saha:
Non-minimally coupled nonlinear spinor field in Bianchi type-I cosmology
The European Physical Journal Plus **134**, 491 (2019)
[DOI: 10.1140/epjp/i2019-12859-7](https://doi.org/10.1140/epjp/i2019-12859-7)

Bijan Saha:
Spinor fields in spherically symmetric space-time
The European Physical Journal Plus **133**, 461 (2018)
[DOI: 10.1140/epjp/i2018-12273-9](https://doi.org/10.1140/epjp/i2018-12273-9)

Bijan Saha:
Spinor field in Bianchi type-IX space-time
Canadian Journal of Physics **96**, 1074 - 1084 (2018)
[DOI: 10.1139/cjp-2017-0711](https://doi.org/10.1139/cjp-2017-0711)

Bijan Saha:
Spinor field nonlinearity and space-time geometry
Physics of Particles and Nuclei **49**(2): 146 – 212 (2018)
[DOI: 10.1134/S1063779618020065](https://doi.org/10.1134/S1063779618020065)

Rybakov, Yu.P. and Saha, B.:
Interaction of Charged 3D Soliton with Coulomb Center
Physics Letters A **222**(1), 5 - 13 (1996)
[DOI:10.1016/0375-9601\(96\)00585-3](https://doi.org/10.1016/0375-9601(96)00585-3)

Rybakov, Yu.P. and Saha, B.:
Soliton Model of Atom

Foundations of Physics **25** (12),1723 - 1731 (1995)
DOI:10.1007/BF02057884

A full list of publications can be found here

[pub_list_DOI.pdf](#)

More about my research can be found here

<http://spinor.bijansaha.ru>

ANNEXES

Replace with list of documents annexed to your CV. Examples:

- copies of degrees and qualifications;
- testimonial of employment or work placement;
- publications or research.